

# MEGA® High Performance Fuses

## Rated 70 V-SF51



## Description

MEGA® 70V High Performance SF51 automotive fuses employ diffusion pill technology to provide predictable time-delayed circuit protection. These MEGA fuses are ideal for protecting batteries, alternators, and heavy gauge wire harnesses that experience large inrushes of current. Use fuses with ampere ratings between 350 A and 500 A only for short circuit protection.

## Features & Benefits

- 1 Mohm open state resistance at 100 V
- High-contrast color coding on housing aids identification
- High tightening torque resistance
- Available with two, one, or no mounting holes
- Comply with ISO 20934 – Type SF51

## Additional Information



Resources

## Applications

- Cars / SUVs
- Trucks
- Power Tools
- 2/3 wheelers
- Offroad vehicles
- Buses
- Watercraft as approved by Littelfuse®

[See Disclaimer Notice](#)

## Specifications

<b>Voltage Rating:</b>	70 V DC
<b>Interrupting Rating:</b>	2500 A @ 70 V DC
<b>Recommended Environmental Temperature:</b>	-40 °C to +125 °C
<b>Terminals Material:</b>	Tin-plated copper alloy
<b>Housing Material:</b>	PPA-GF33 (UL 94 Flammability rating of HB)
<b>Open State Resistance (OSR):</b>	> 1 Mohm (after fuse opening) at 100 V
<b>Typical Weight per Fuse:</b>	12.0 g
<b>Mounting Torque M6:</b>	9 Nm ± 1 Nm
<b>Mounting Torque M8:</b>	20 Nm ± 1 Nm
<b>Comply With:</b>	ISO 20934 - Type SF51















# MEGA<sup>®</sup> High Performance Fuses

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### Ordering Information

Part Number	Current Rating (A)	Package Size	Bolt Size	Bolt Hole Qty
0998xxx.U-2M8	60 – 500	500	M8	2
0998xxx.U-1M8	60 – 500	500	M8	1
0998xxx.U-2M6	60 – 500	500	M6	2
0998xxx.U-1M6	60 – 500	500	M6	1
0998xxx.U-NH	60 – 500	500	-	0

### Ratings

Part Number	Current Rating (A)	Font Color	Test Cable Size (mm <sup>2</sup> )	Typ. Voltage Drop (mV)	Typ. Cold Resistance (mΩ)	Typ. I <sup>2</sup> t (A <sup>2</sup> s)
0998060._	60		6	75.5	0.90	22 800
0998080._	80		10	88.0	0.75	34 900
0998100._	100		10	66.7	0.46	24 000
0998125._	125		16	70.4	0.37	38 000
0998150._	150		25	70.6	0.32	58 100
0998175._	175		25	79.2	0.28	79 300
0998200._	200		35	76.9	0.24	123 600
0998225._	225		35	76.6	0.21	142 500
0998250._	250		50	66.0	0.17	220 000
0998300._	300		50	46.9 <sup>2</sup>	0.15	340 000
0998350._	350 <sup>1</sup>		50	50.7 <sup>2</sup>	0.14	495 000
0998400._	400 <sup>1</sup>		70	50.1 <sup>2</sup>	0.12	872 000
0998450._	450 <sup>1</sup>		70	52.9 <sup>2</sup>	0.10	1 224 000
0998500._	500 <sup>1</sup>		70	56.3 <sup>2</sup>	0.09	1 800 000

**Note:** The typical I<sup>2</sup>t is an average value calculated from the breaking capacity tests by using the melting time before the arcing occurs.

1: Short Circuit protectors

2: Voltage drop measurement taken at 75% of rated current

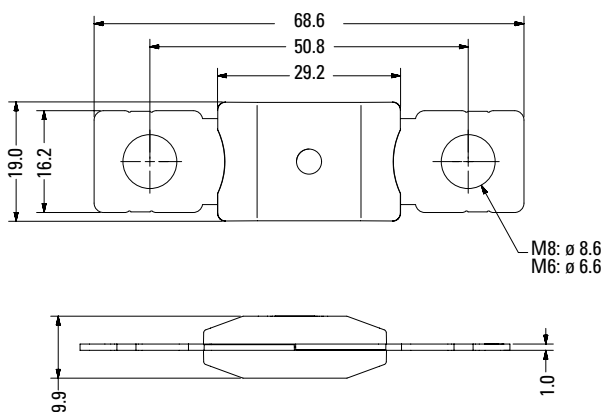
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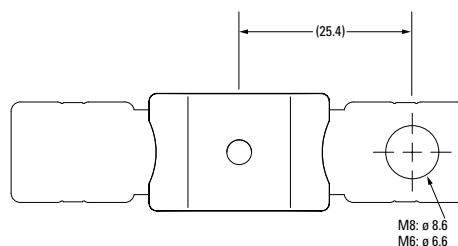
## Dimensions

Dimensions in mm. Please refer to the outline drawing for dimensions and tolerances.

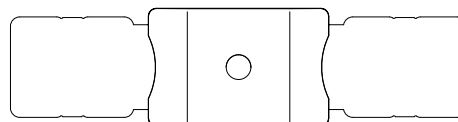
**2-Holes version (M8/ M6)**



**1-Hole version (M8/M6)**



**No-Holes version**

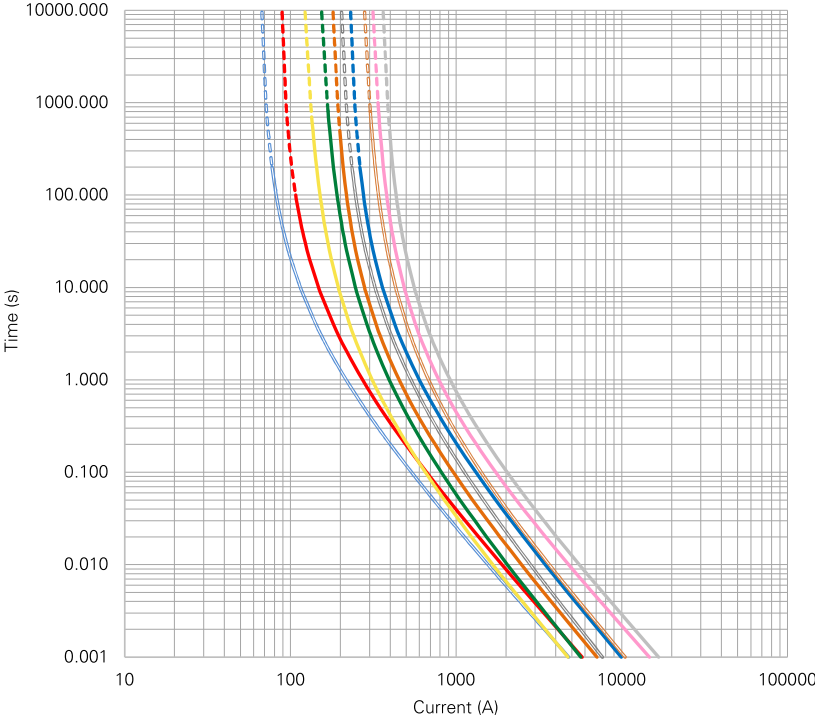


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### Time-Current Characteristic

Fuses

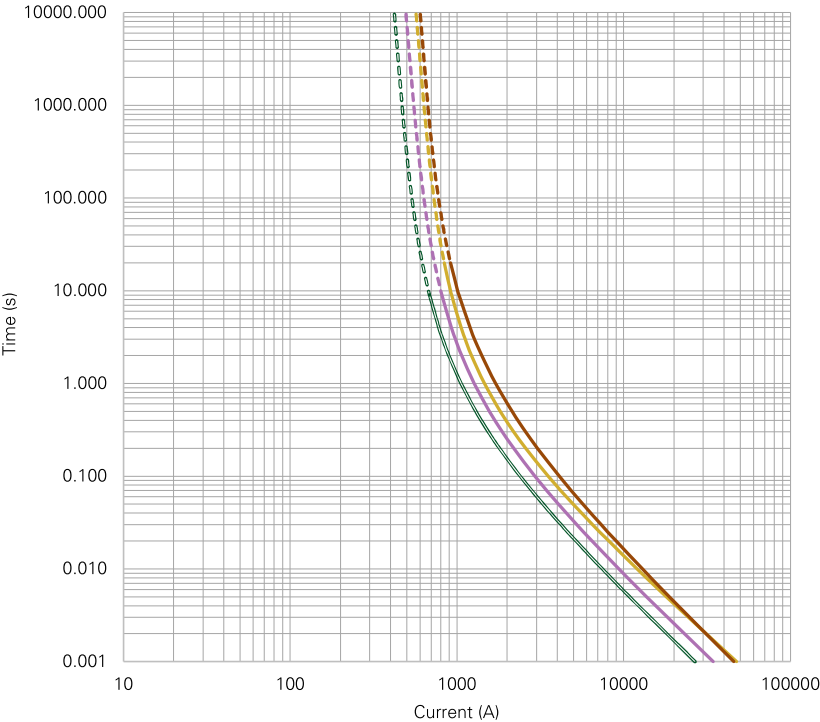


% of Rating	Opening Time Min / Max (s)	
	60-250	300
75	- / -	14 400 / ∞
100	14 400 / ∞	- / -
135	120 / 1800	120 / 1800
150	20 / 450	20 / 450
200	1 / 15	1 / 15
350	0.3 / 5	0.3 / 5
600	0.1 / 1	0.1 / 1

- 60 A
- 80 A
- 100 A
- 125 A
- 150 A
- 175 A
- 200 A
- 225 A
- 250 A
- 300 A

**Note:** Current recommendation may be impacted by the final condition of the application (terminals characteristics, wire size etc..). Please contact Littelfuse® for more information.

Protectors



% of Rating	Opening Time Min / Max (s)
	350-500
75	14 400 / ∞
100	- / -
135	- / -
150	- / -
200	1 / 15
350	0.5 / 5
600	0.1 / 1

- 350 A
- 400 A
- 450 A
- 500 A

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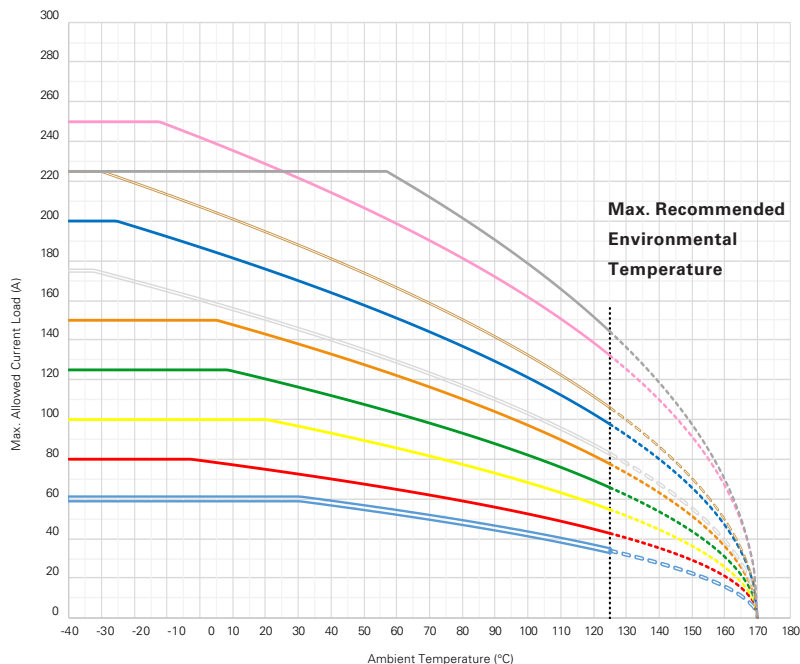
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### Typical Derating Curves

Please contact Littelfuse® for Details Regarding Derating Test Set Up

#### Fuses

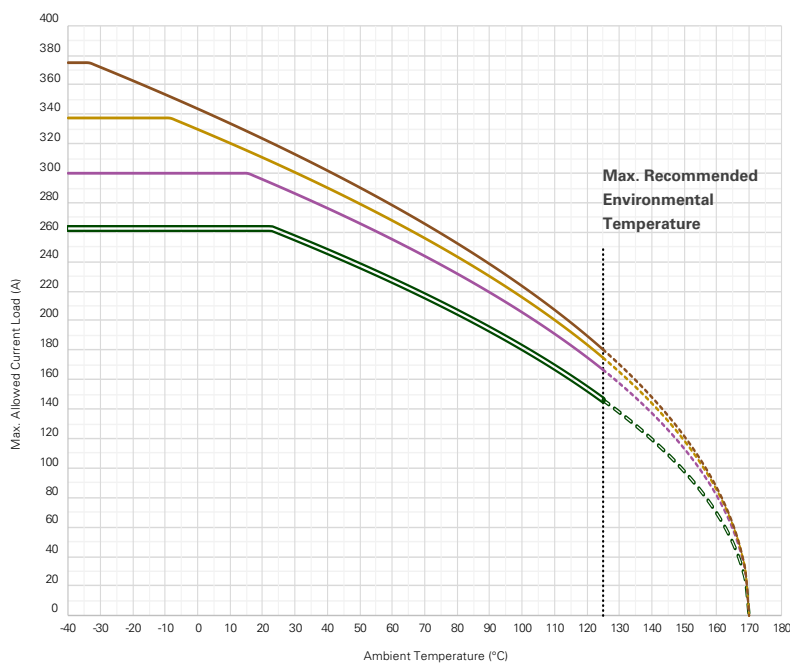


Max. allowed current load (A) at ambient temperature based on typical derating							
	-40 °C	0 °C	20 °C	65 °C	85 °C	110 °C	125 °C
<b>60A</b>	60	60	60	52	47	39	34
<b>80A</b>	80	79	75	63	57	49	43
<b>100A</b>	100	100	100	84	75	63	55
<b>125A</b>	125	125	120	101	90	76	66
<b>150A</b>	150	150	143	119	107	90	78
<b>175A</b>	175	160	151	126	114	95	83
<b>200A</b>	200	187	176	148	133	112	98
<b>225A</b>	225	207	195	163	146	123	106
<b>250A</b>	250	242	229	194	177	151	132
<b>300A</b>	225	225	225	217	196	166	144

- 60 A
- 80 A
- 100 A
- 125 A
- 150 A
- 175 A
- 200 A
- 225 A
- 250 A
- 300 A

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#### Protectors



Max. allowed current load (A) at ambient temperature based on typical derating							
	-40 °C	0 °C	20 °C	65 °C	85 °C	110 °C	125 °C
<b>350A</b>	263	263	263	222	200	168	146
<b>400A</b>	300	300	296	250	226	191	167
<b>450A</b>	338	330	311	262	237	201	175
<b>500A</b>	375	344	323	272	246	207	180

- 350 A
- 400 A
- 450 A
- 500 A

**Note:** Current recommendation may be impacted by the final condition of the application (terminals characteristics, wire size etc.). Please contact Littelfuse® for more information.

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